#### **SECTION 02621**

# EXTRA STRENGTH CLAY PIPE

### PART 1 - GENERAL

### 1.01 SECTION INCLUDES

- A. Extra strength vitrified clay pipe for direct burial.
- B. Vitrified clay pipe for jacking and microtunneling.

## 1.02 UNIT PRICES

- A. No separate payment will be made for extra strength vitrified clay pipe under this section. Include cost in unit price work included in the Bid Proposal, as specified in the following sections:
  - 1. Section 02312 Microtunneling and Pipe Jacked Tunnels
  - 2. Section 02730 Gravity Sanitary Sewers.

# 1.03 SUBMITTALS

- A. Conform to requirements of all provisions and sections of these specifications.
- B. Submit complete product data for pipe, fittings, gaskets and couplings for approval. Indicate conformance to appropriate reference standards.
- C. Submit certificates by a testing laboratory, hired and paid by the manufacturer, that clay pipes meet applicable standards when tested in accordance with ASTM C 301.

# PART 2 - PRODUCTS

## 2.01 VITRIFIED CLAY PIPE

- A. Vitrified clay pipe for direct burial shall conform to ASTM C 700 requirements for extra strength clay pipe.
- B. Approved manufacturers of extra strength clay pipe are Mission Clay Products Corporation and the Dickey Company.

# 2.02 JOINTS

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- A. Joints for extra strength vitrified clay shall conform to ASTM C425.
  - 1. For clay pipe 21 inches in diameter and larger, conform to requirements for compression joints for bell-and-spigot pipe.
  - 2. For clay pipe 18 inches in diameter and smaller, conform to requirements for compression couplings for plain-end pipe.
- B. Joints for jacking, sliplining, and microtunneling pipe shall conform to ASTM C1208.

### 2.03 GASKETS

- A. Furnish when no contaminant is identified, rubber or polyurethane elastomer gasket material conforming to standards listed above.
- B. Pipe to be installed in potentially contaminated areas, as shown on the plans or identified in the field by the Owner's Representative, especially where free product is found near the elevation of the proposed sewer, shall have the following gasket material for the noted contaminants:

CONTAMINANT	GASKET MATERIAL REQUIRED
Petroleum (diesel, gasoline)	Nitrile Rubber
Other Contaminants	As recommended by the pipe manufacturer

## 2.04 COMPRESSION COUPLINGS

- A. The PVC collar material for compression couplings of plain-end pipe shall conform to requirements of ASTM D 1784, Class 12454-B.
- B. Couplings for microtunneling and other pipe jacking methods shall be made with Type 316 stainless steel sleeve couplings that utilize elastomeric sealing gaskets as the sole means to maintain joint water\_tightness. The joints shall have the same outside diameter as the pipe so when the pipes are assembled, the joints are flush with the pipe outside surface.

### PART 3 - EXECUTION

#### 3.01 INSTALLATION

A. Conform to installation requirements of Sections 02312 - Microtunneling and Pipe Jacked Tunnels and 02730 Gravity Sanitary Sewers.

B. Install pipe in accordance with ASTM C 12, the NCPI Clay Pipe Engineering Manual, and manufacturer's recommendations.

# 3.02 ACCEPTANCE TESTING

A. Perform acceptance testing in accordance with Section 02732 - Acceptance Testing for Sanitary Sewer, and ASTM C 1091. Do not use procedures from ASTM C 828 unless authorized by Owner's Representative.

# 3.03 FIELD QUALITY ASSURANCE

A. The City may run tests on field samples following applicable ASTM standards at an independent laboratory to verify the required physical properties and characteristics of supplied materials. Provide product samples as requested by Owner's Representative.

**END OF SECTION**